

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Nashville 2960 Foster Creighton Drive Nashville, TN 37204 Tel: (615)726-0177

TestAmerica Job ID: 490-59364-1

Client Project/Site: Everett Terminal - Outfall 01 A

For:

Exxon Global Remed. Grp 52 Beacham Street Everett, Massachusetts 02149

Attn: Damian Guzman



Authorized for release by: 8/28/2014 2:48:02 PM

Gail Lage, Senior Project Manager (615)301-5741 gail.lage@testamericainc.com

----- LINKS -----

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal - Outfall 01 A TestAmerica Job ID: 490-59364-1

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Sample Summary

Client: Exxon Global Remed. Grp

Project/Site: Everett Terminal - Outfall 01 A

TestAmerica Job ID: 490-59364-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-59364-1	Outfall 01 A TSS-1	Water	08/13/14 08:28	08/14/14 08:30
490-59364-4	Outfall 01 A	Water	08/13/14 08:28	08/14/14 08:30

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Case Narrative

Client: Exxon Global Remed. Grp

Project/Site: Everett Terminal - Outfall 01 A

TestAmerica Job ID: 490-59364-1

Job ID: 490-59364-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-59364-1

Receipt

The samples were received on 8/14/2014 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.6° C.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Definitions/Glossary

Client: Exxon Global Remed. Grp

Project/Site: Everett Terminal - Outfall 01 A

TestAmerica Job ID: 490-59364-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Exxon Global Remed. Grp

Project/Site: Everett Terminal - Outfall 01 A

TestAmerica Job ID: 490-59364-1

Client Sample ID: Outfall 01 A TSS-1

Date Collected: 08/13/14 08:28 Date Received: 08/14/14 08:30 Lab Sample ID: 490-59364-1

Matrix: Water

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	12.6		2.00	1.40	mg/L	_		08/14/14 14:09	1

Client Sample Results

Client: Exxon Global Remed. Grp

Client Sample ID: Outfall 01 A

Project/Site: Everett Terminal - Outfall 01 A

TestAmerica Job ID: 490-59364-1

Lab Sample ID: 490-59364-4

Matrix: Water

Date Collected: 08/13/14 08:28 Date Received: 08/14/14 08:30

General Chemistry Analyte Result Qualifier RLMDL Unit D Prepared Analyzed Dil Fac Oil & Grease (HEM) <1.56 4.47 1.56 mg/L 08/26/14 13:44 08/26/14 13:44

Client: Exxon Global Remed. Grp

Project/Site: Everett Terminal - Outfall 01 A

TestAmerica Job ID: 490-59364-1

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 490-186513/1-A

Matrix: Water

Analysis Batch: 186516

Client Sample ID: Method Blank Prep Type: Total/NA

Client Sample ID: Lab Control Sample

Client Sample ID: Matrix Spike

Client Sample ID: Method Blank

Prep Batch: 186513

Prep Type: Total/NA

Prep Batch: 186513

Prep Type: Total/NA

мв мв

Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Analyte 4.00 08/26/14 13:44 08/26/14 13:44 Oil & Grease (HEM) <1.40 1.40 mg/L

Lab Sample ID: LCS 490-186513/2-A

Matrix: Water

Analysis Batch: 186516

LCS LCS Spike Added Unit %Rec

Result Qualifier Analyte Limits Oil & Grease (HEM) 41.7 37.19 mg/L 89 78 - 114

Lab Sample ID: 490-59729-B-2-A MS

Matrix: Water

Analysis Batch: 186516

Prep Batch: 186513 Spike MS MS %Rec. Sample Sample Result Qualifier Added Result Qualifier Unit D %Rec Limits Oil & Grease (HEM) <1.60 47.6 43.93 mg/L 78 - 114

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 490-183794/1

Matrix: Water

Analysis Batch: 183794

MB MB

Result Qualifier RL MDL Unit Analyzed Dil Fac Prepared <0.700 1.00 08/14/14 14:09 Total Suspended Solids 0.700 ma/L

Lab Sample ID: LCS 490-183794/2

Matrix: Water

Analysis Batch: 183794

Spike LCS LCS %Rec. babbA Result Qualifier Analyte Unit %Rec Limits Total Suspended Solids 100 108.5 mg/L 109 90 - 110

Lab Sample ID: LCSD 490-183794/3

Matrix: Water

Analysis Batch: 183794

LCSD LCSD Spike %Rec. RPD Added Analyte Result Qualifier Unit D %Rec Limits RPD Limit **Total Suspended Solids** 100 98.20 mg/L 98 90 - 110 20

Lab Sample ID: 490-59273-M-2 DU

Matrix: Water

Analysis Batch: 183794 Sample Sample DU DU RPD Analyte Result Qualifier Result Qualifier Unit D RPD Limit Total Suspended Solids 109 123.0 mg/L

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Client Sample ID: Lab Control Sample Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

QC Sample Results

Client: Exxon Global Remed. Grp

Project/Site: Everett Terminal - Outfall 01 A

TestAmerica Job ID: 490-59364-1

Client Sample ID: Duplicate

Prep Type: Total/NA

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: 490-59291-B-13 DU

Matrix: Water

Analyte

Analysis Batch: 183794

Total Suspended Solids

Sample	Sample	DU	DU				RPD
Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
231		234.0		mg/L		1	20

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QC Association Summary

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal - Outfall 01 A

inct/Site: Everett Terminal - Outfall 01 A

General Chemistry

Analysis Batch: 183794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-59273-M-2 DU	Duplicate	Total/NA	Water	SM 2540D	
490-59291-B-13 DU	Duplicate	Total/NA	Water	SM 2540D	
490-59364-1	Outfall 01 A TSS-1	Total/NA	Water	SM 2540D	
LCS 490-183794/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 490-183794/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
MB 490-183794/1	Method Blank	Total/NA	Water	SM 2540D	

Prep Batch: 186513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-59364-4	Outfall 01 A	Total/NA	Water	1664A	
490-59729-B-2-A MS	Matrix Spike	Total/NA	Water	1664A	
LCS 490-186513/2-A	Lab Control Sample	Total/NA	Water	1664A	
MB 490-186513/1-A	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 186516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-59364-4	Outfall 01 A	Total/NA	Water	1664A	186513
490-59729-B-2-A MS	Matrix Spike	Total/NA	Water	1664A	186513
LCS 490-186513/2-A	Lab Control Sample	Total/NA	Water	1664A	186513
MR 490-186513/1-A	Method Blank	Total/NA	Water	1664Δ	186513

TestAmerica Job ID: 490-59364-1

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Lab Chronicle

Client: Exxon Global Remed. Grp

Project/Site: Everett Terminal - Outfall 01 A

Client Sample ID: Outfall 01 A TSS-1

TestAmerica Job ID: 490-59364-1

Lab Sample ID: 490-59364-1

Matrix: Water

Date Collected: 08/13/14 08:28 Date Received: 08/14/14 08:30

Batch Dil Initial Final Batch Prepared Batch Prep Type Method Type Run Factor Amount **Amount** Number or Analyzed Analyst Lab Total/NA Analysis SM 2540D 500 mL 1000 mL 183794 08/14/14 14:09 CRM TAL NSH

Client Sample ID: Outfall 01 A Lab Sample ID: 490-59364-4

Date Collected: 08/13/14 08:28 Matrix: Water

Date Received: 08/14/14 08:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	1664A		1	860 mL	960 mL	186516	08/26/14 13:44	BAD	TAL NSH
Total/NA	Prep	1664A			860 mL	960 mL	186513	08/26/14 13:44	BAD	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Exxon Global Remed. Grp

Project/Site: Everett Terminal - Outfall 01 A

TestAmerica Job ID: 490-59364-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	TAL NSH
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL NSH

Protocol References:

1664A = EPA-821-98-002

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

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TestAmerica Job ID: 490-59364-1

Client: Exxon Global Remed. Grp Project/Site: Everett Terminal - Outfall 01 A

Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-15
A2LA	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	10-31-14
Arizona	State Program	9	AZ0473	05-05-15
Arkansas DEQ	State Program	6	88-0737	04-25-15
California	NELAP	9	1168CA	10-31-14
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-15
Illinois	NELAP	5	200010	12-09-14
lowa	State Program	7	131	04-01-16
Kansas	NELAP	7	E-10229	10-31-14
Kentucky (UST)	State Program	4	19	06-30-15
_ouisiana	NELAP	6	30613	06-30-15
Maryland	State Program	3	316	03-31-15
Massachusetts	State Program	1	M-TN032	06-30-15
Minnesota	NELAP	5	047-999-345	12-31-14
Mississippi	State Program	4	N/A	06-30-15
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-15
New Hampshire	NELAP	1	2963	10-09-14
New Jersey	NELAP	2	TN965	06-30-15
New York	NELAP	2	11342	03-31-15
North Carolina (WW/SW)	State Program	4	387	12-31-14
North Dakota	State Program	8	R-146	06-30-14 *
Ohio VAP	State Program	5	CL0033	10-16-15
Oklahoma	State Program	6	9412	08-31-14 *
Oregon	NELAP	10	TN200001	04-29-15
Pennsylvania	NELAP	3	68-00585	06-30-15
Rhode Island	State Program	1	LAO00268	12-30-14
South Carolina	State Program	4	84009 (001)	02-28-15
South Carolina (DW)	State Program	4	84009 (002)	02-23-17
Tennessee	State Program	4	2008	02-23-17
Гехаѕ	NELAP	6	T104704077	08-31-15
JSDA	Federal		S-48469	10-30-16
Jtah	NELAP	8	TN00032	07-31-15
/irginia	NELAP	3	460152	06-14-15
- Mashington	State Program	10	C789	07-19-15
West Virginia DEP	State Program	3	219	02-28-15
Visconsin	State Program	5	998020430	08-31-15
Wyoming (UST)	A2LA		453.07	12-31-15

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^{*} Certification renewal pending - certification considered valid.

COOLER RECEIPT FORM



Cooler Received/Opened On 8/14/2014 @ 08:30 1. Tracking # (last 4 digits, FedEx) IR Gun ID___17610176_ Courier: ___ _FedEx_ 2. Temperature of rep. sample or temp blank when opened: U_i Q Degrees Celsius 3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO. (NA) 4. Were custody seals on outside of cooler? YÊS ... NO... NA If yes, how many and where: 5. Were the seals intact, signed, and dated correctly? YES...NO...NA 6. Were custody papers inside cooler? I certify that I opened the cooler and answered questions 1-6 (intial) 7. Were custody seals on containers: and Intact YES...NO...NA Were these signed and dated correctly? YES...NO.(.ÑA 8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None 9. Cooling process: (Ice (direct contact) Other None Ice-pack Dry ice 10. Did all containers arrive in good condition (unbroken)? (ES.)NO...NA 11. Were all container labels complete (#, date, signed, pres., etc)? YES ... NO... NA YES...NO...NA 12. Did all container labels and tags agree with custody papers? YES NO NA 13a. Were VOA vials received? b. Was there any observable headspace present in any VOA vial? YES...NO. (NA YES. (NO...NA 14. Was there a Trip Blank in this cooler? If multiple coolers, sequence # I certify that I unloaded the cooler and answered questions 7-14 (intial) 15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO (Ñ) b. Did the bottle labels indicate that the correct preservatives were used YES...NO. (NA 16. Was residual chlorine present? YES...NO. I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) 17. Were custody papers properly filled out (ink, signed, etc)? 18. Did you sign the custody papers in the appropriate place? ..NO...NA 19. Were correct containers used for the analysis requested? NO...NA 20. Was sufficient amount of sample sent in each container? .NO...NA I certify that I entered this project into LIMS and answered questions 17-20 (intial) I certify that I attached a label with the unique LIMS number to each container (intial)

21. Were there Non-Conformance issues at login? YES /NO Was a NCM generated? YES (NO).#

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2960 Foster Creighton THE LEADER IN ENVIRONMENTAL TESTING Nashville, TN 37204 Nashville Division

Toll Free: 800-765-0980

Phone: 615-726-0177

Fax: 615-726-3404

ExonMobil

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Consultant Name:	Consultant Name: ExxonMobil Everett Terminal	rminal						TA Account #:	#:		
Address:								Invoice	Invoice To: (ExxonMobil PM unless otherwise indicated)		
City/State/Zip:	Everett, MA 02149							Report 1	Report To: sperry@triumvirate.com; damian.a.guzman@exxonmobil	<u> nexxonmobil.com</u>	
ExxonMobil Project Mgr: Damian Guzman	Damian Guzman							#04	#		
Consultant Project Mgr. Triumvirate - Sandra Perry (Call Visoth at (617) 799 - 4357	Triumvirate - Sandra F	eny (Call Vis	oth at (617)		for sample related questions	ated question	(St	PROJECT	PROJECT #: NPDES Permit MA0000833	-	
	247 204 2002				2004 2004 20			Facility ID #	#ic		
Sampler Name: (Print) Visoth Srend	Visoth Srena			Lax N	Fax No.: 617-361-2834	405		City. State. Zip	SS SAME ID		
Sampler Signature:	Susp						Regu	Regulatory District (CA)	(A)		
				L					Analyze For:		
					Perservative	ive	Matrix	Monthly	Quarterly		
Monthly 1st Rain O O C C C C C C C C C C C	Date Sampled	No. of Containers Shipped	ejleodmoO	Field Filtered	H ₂ SO ₄ Pigatic (Yellow Label) HCI (Blue Label) NaOH (Orange Label)	H ₂ SO ₄ Glass(Yellow Label) HMO ₃ (Red Label)	Groundwaler Wastewaler Drinking Water Sludge	Soil & Grease + EPA 1664		RUSH TAT (Pre-gohedule) * TAT request in Bus. Days)	Due Date of Report
Outfall 01 A-TSS - 1	8.18.14 0828	- ×				×	×	×		1 L Plastio X 1	
9 Outfall 01 A-TSS - 2		~				×	x HOLD 1	HOLD for analysis		1 L Plastic	
Outfall 01 A-TSS - 3		۲- ×				×	× HOLD i	HOLD for analysis		1 L Plastic	
Outfall 01 A	K K	2 ×			×		×		×	10	
Comments/Special Instructions: Laboratory case narative to NELAC Institute standard protocol,									Laboratory Comments: Temperature Upon Receipt: Sample Containers Intact? VOCs Free of Headspace?	z z	
Relinquished by:	Date 842.14	7101 1015	Received by:	, à	The start	- n	Shiffy	Time (\$ \$ 13.0	QC Deliverables (please circle one) Level 2	Other	
Relinquished by:	Date	Time	Received	Received by TestAmerica	erica:		Date	Time	consultant to notify the TestAmerica Project Manager by phone or fax that a nush sample will be submitted. TA Project Manager. Date:	Flow (MGD)	
/28/201		Ref: S Dep:	Ref: S490-24883 Dep:		(1) ++	: 09May14 10.00 LBS	SHIPPING: SPECIAL: HANDLING:		0.00 Grab pot 7,5 su.		
Prenared vsreng 01A					.: 		0.00 IUIAL:			Prenared vsreng 01A	

Svos: PRIORITY OVERNIGHT TRCK: 6038 1897 9692

Prepared vsreng 01A

Login Sample Receipt Checklist

Client: Exxon Global Remed. Grp Job Number: 490-59364-1

Login Number: 59364 List Source: TestAmerica Nashville

List Number: 1

Creator: Huskey, Adam

Creator: Huskey, Adam			
Question	Answer	Comment	
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True		
The cooler's custody seal, if present, is intact.	True		
Sample custody seals, if present, are intact.	N/A		
The cooler or samples do not appear to have been compromised or ampered with.	True		
Samples were received on ice.	True		
Cooler Temperature is acceptable.	True		
Cooler Temperature is recorded.	True		
COC is present.	True		
COC is filled out in ink and legible.	True		
COC is filled out with all pertinent information.	True		
s the Field Sampler's name present on COC?	True		
There are no discrepancies between the containers received and the COC.	True		
Samples are received within Holding Time.	True		
Sample containers have legible labels.	True		
Containers are not broken or leaking.	True		
Sample collection date/times are provided.	True		
Appropriate sample containers are used.	True		
Sample bottles are completely filled.	True		
Sample Preservation Verified.	N/A		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True		
Multiphasic samples are not present.	True		
Samples do not require splitting or compositing.	True		
Residual Chlorine Checked.	N/A		

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